SAR13423

PATENT APPLICATION Serial No. 09/588,276

at six times per second, S4 at ten times per second and S5 at fifteen times per second. A test bitstream including the set of sequences \$1, \$2, ... \$5 is useful for testing the prediction length of decoder 20, i.e. wherein the time between the initiation of the test bitstream and the onset of detectable pulsing provides an indication of the time it takes for the test result image to degrade, i.e. as the number of pictures having predictively coded regions between entirely intra-coded pictures increases. The number of pictures having predictively coded regions can be counted and displayed as a number inserted at a corner or other convenient location in the test result image 100 as an indication of prediction length, which is useful because some degradation of the predicted image is allowed and is not objectionable to a typical viewer of the video decoded by the D.U.T. 30 in normal use. The observing tester 40 can then evaluate various decoders 30 based on their relative performance in a prediction length test, i.e. how long it takes for the test result image 100 to degrade to the point that prediction decoding errors become objectionable.

Paragraph starting at page 14, line 30:

For example, one advantageous test bitstream produces a test result image 100' wherein differently coded regions 120 and 130 are in contrasting colors, such as black and white or red and green, meeting at a boundary line 112. The predictive coding of the motion vector is then set refer to an offset pixel region of a prior picture to move region 130 in a given direction, in effect to move the boundary line 112 in a given direction. The predictive coding is coded with correction IDCT values to "correct" the pixels in the macroblocks of region 130 that move or are offset over the original position of boundary line 112 to be pixels of the contrasting color. I.e., while the actual boundary 112 between the intra-coded and predictive coded regions contained in the test bitstream moves in the given direction, the pixel values of region 130 are "corrected" to undo that motion in the reproduced image 100', so that a properly decoded bitstream will produce a result image 100' that does not change, i.e. one in which the boundary 112 does not appear to move and the color of regions 120,